

App. No. 10/477,971
Amndt. dated Dec. 11, 2003
Resp. to Office Action dated July 29, 2003

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Please amend the claims as shown and add new Claims 26-28:

1. (Original) Process for the preparation of completely or partly saturated organic compounds by catalytic hydrogenation of unsaturated organic compounds with hydrogen or hydrogen-containing gas mixtures in the presence of a shaped Raney catalyst as the hydrogenation catalyst, characterized in that the Raney catalyst is in the form of hollow bodies.
2. (Original) Process according to claim 1, characterized in that the Raney catalysts in the form of hollow bodies comprise nickel, cobalt, copper, iron, platinum, palladium, ruthenium or mixtures of these metals as catalytically active constituents.
3. (Original) Process according to claim 1 or 2, characterized in that the Raney catalyst is in the form of hollow spheres.
4. (Previously Presented) Process according to claim 1 or 2, characterized in that the bulk density of the Raney catalysts used is in the range from 0.3 g/ml to 1.3 g/ml.
5. (Previously Presented) Process according to claim 1 or 2, characterized in that the catalyst shaped articles used have a diameter in the range from 0.05 to 20 mm.

6. (Currently Amended) Process according to claim 1 or 2, characterized in that the catalyst shaped articles used have a shell thickness in the range from 0.05 to 7 mm, ~~preferably 0.1 mm to 5 mm.~~

7. (Previously Presented) Process according to claim 1 or 2, characterized in that the activated catalyst shaped articles used in the process comprise an inorganic binder.

8. (Previously Presented) Process according to claim 1 or 2, characterized in that the activated catalyst shaped articles used in the process comprise no binder.

9. (Currently Amended) Process according to claim 1 or 2, characterized in that the Raney catalyst in the form of hollow bodies used is doped with one or more elements from groups 3B to 7B, 8 and 1B of the periodic table, ~~in particular chromium, manganese, iron, vanadium, tantalum, titanium, tungsten, molybdenum, rhenium and/or metals of the platinum group.~~

10. (Previously Presented) Process according to claim 1 or 2, characterized in that the Raney catalyst in the form of hollow bodies used is doped with one or more elements from groups 1A, 2A, 2B and/or 3A of the periodic table and/or germanium, tin, lead, antimony or bismuth.

11. (Previously Presented) Process according to claim 1 or 2, characterized in that the hydrogenation is carried out in a fixed bed or suspension reactor in continuous operation.

12. – 24. (Deleted)

25. (Previously Presented) Process according to claim 1 or 2 wherein the unsaturated organic compound contains a C – C double bond or a C – C triple bond.

26. (New) Process according to claim 1 or 2, characterized in that the catalyst shaped articles used have a shell thickness in the range from 0.1 to 5 mm

27. (New) Process according to claim 1 or 2, characterized in that the Raney catalyst in the form of hollow bodies is doped with chromium, manganese, iron, vanadium, tantalum, titanium, tungsten, molybdenum, rhenium and/or metals of the platinum group.

28. (New) Process for the preparation of completely or partly saturated organic compounds by catalytic hydrogenation of unsaturated organic compounds with hydrogen or hydrogen-containing gas mixtures in the presence of a shaped Raney catalyst as the hydrogenation catalyst, characterized in that the Raney catalyst is in the form of hollow bodies produced by forming a mixture of an alloy powder of a catalytically active metal with a leachable metal that can be leached out, an organic binder, optionally an inorganic binder, and water, applying said mixtures to spheres formed of a material that is vaporizable to form coated spheres, calcining said coated spheres to remove vaporizable material and to sinter the catalytically active metal, thereafter activating the spheres by treatment with an alkaline solution to leach out said leachable metal.